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# HPV Assessment Report and Test Plan for Sodium Lauryl Sulfoacetate (Acetic Acid, sulfo-,1-dodecyl ester sodium salt) CAS 1847-58-1

**Appendix B** 

**Exposure and Use Information** 

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# Sodium Lauryl Sulfoacetate (Acetic Acid, sulfo-,1-dodecyl ester sodium salt) CAS 1847-58-1

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## **Exposure and Use Information**

#### 1 INTRODUCTION

An evaluation and assessment of the detergent sodium lauryl sulfoacetate (CAS 1847-58-1; commercial name: Lathanol LAL), classified as a high production volume (HPV) chemical was submitted to EPA by Stepan Company on 11 January 2005. This supplemental submission provides a brief exposure and use assessment for Sodium lauryl sulfoacetate.

#### 2 GENERAL INFORMATION ON EXPOSURE

#### 2.1 Production Volumes and Use Pattern

The production volume for sodium lauryl sulfoacetate in 2006 was 1,001,615 lb (Stepan, 2007). Sodium lauryl sulfoacetate is used as a cosmetic ingredient in personal care.

#### 2.2 Environmental Exposure and Fate

#### 2.2.1 Sources of Environmental Exposure

It is recommended that LATHANOL LAL be stored in sealed containers and kept in a cool, dry place (Stepan, 2006). Partly used drums should be promptly resealed with drum cover and accessory clamp after twisting and tying off the poly-bag liner. The product is sold as a powder; during drying processes there may be emissions to air and water (all releases operate under appropriate permits).

#### 2.3 Human Exposure

#### 2.3.1 Occupational Exposure

The number of workers involved in the manufacture of Lathanol LAL is 4-5 (Stepan, 2007). Engineering controls such as ventilation should effectively remove and prevent build-up of any dust generated from the handling of this product (Stepan, 2005). Explosion-proof equipment is recommended if high dust/air concentrations are possible. Local exhaust is suggested for use, where possible, in enclosed or confined spaces. Personal Protective Equipment for the eyes/face is recommended including the use of dust goggles and work clothing sufficient to prevent all skin contact, such as coveralls, long sleeves and impervious gloves. If exposure limits are exceeded or if

irritation is experienced, NIOSH approved respiratory protection is recommended. Eye wash fountain and emergency showers are also recommended.

#### 2.3.2 Consumer Exposure

Sodium lauryl sulfoacetate is used as a cosmetic ingredient in personal care including Bubble Baths, Cream & Paste Shampoos, Shampoos, Syndet Bars, and Cleansing Creams (Stepan, 2006). Its functional properties are as a Primary/Secondary Surfactant, Detergent, Foaming Agent, Wetting Agent and Emulsifier. The commercial product Lathanol LAL Powder contains 64-85% sodium lauryl sulfoacetate. The remaining components are sodium sulfate and sodium chloride. Consumer products are formulated with a concentration range of 1-30% Lathanol LAL Powder.

### 3 REFERENCES

Stepan Company (2005) Material Safety Data Sheet Lathanol Lal Powder. Revision date 03/16/2005.

Stepan Company (2006) Product Bulletin LATHANOL® LAL.

Stepan Company (2007) Personal communication with Dr L Jovanovich, Sr. Research Toxicologist Product Safety and Compliance.